

# Labor Market Inequalities and Their Effects on Life Expectancy: A Note

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## **ABSTRACT**

Labor market inequalities—including differences in income, gender, and employment type—play a critical role in shaping life expectancy disparities. This literature review synthesizes findings from 20 studies examining how formal versus informal employment, wage gaps, and occupational segregation influence longevity. Evidence indicates that secure, formal work and robust labor protections enhance life expectancy, while informal and precarious labor exacerbate disparities. The review highlights the mediating effects of socioeconomic status and gender, and identifies gaps for future research on integrated labor and health policies.

**Keywords:** Labor market inequalities, Life expectancy disparities, Employment type

#### 1. Introduction

Life expectancy is a widely used indicator of population health and societal well-being, yet it is not uniform across populations. Evidence increasingly points to the role of labor market inequalities—including income disparities, gender differences, and employment type—in shaping longevity outcomes. While formal employment generally provides access to social protections, healthcare, and income stability that promote longevity, informal, precarious, or low-wage work often exposes individuals to health risks and reduces life expectancy (Gazilas, 2024; Solovieva et al., 2024; Roelfs, Shor, & Davidson, 2011).

Income and socioeconomic status play a mediating role in this relationship. Chetty et al. (2016) show that life expectancy in the United States varies by over a decade between top and bottom income deciles, with labor market conditions acting as a key pathway for these disparities. Similarly, Scott (2023) and Atolia (2024) highlight how broader labor market structures, including employment regulations and access to formal work, shape the distribution of longevity benefits within populations.

Gender also intersects with labor inequalities. Women are often overrepresented in part-time, informal, or lower-paid occupations, which limits their access to the health-promoting benefits of employment (Roelfs et al., 2011; Solovieva et al., 2024). Additionally, demographic shifts such as population aging and declining fertility influence labor participation patterns, further modifying life expectancy outcomes (Queiroz et al., 2021).

The objective of this research note is to synthesize the literature on labor market inequalities and life expectancy disparities, focusing on three central questions:

- 1. How do income, gender, and employment type contribute to disparities in life expectancy?
- 2. What role do labor market regulations and social protections play in mediating these disparities?

3. How do demographic and socioeconomic factors shape the distribution of longevity benefits from employment?

By integrating findings from a curated set of studies spanning diverse countries and contexts, this note aims to provide a comprehensive overview of how labor market inequalities create differential life expectancy outcomes. The synthesis will highlight both consistent findings and gaps in the literature, offering a foundation for future research focused on equitable labor and health policy interventions.

#### 2. Literature Review

The literature on labor market inequalities consistently demonstrates that employment type, income, and gender disparities are key determinants of life expectancy differences. Multiple studies highlight the pathways through which labor market conditions translate into longevity outcomes.

Income disparities are a central factor driving life expectancy gaps. Chetty et al. (2016) show that in the United States, individuals in the highest income deciles live over a decade longer than those in the lowest deciles, largely mediated by differences in employment quality and stability. Employment provides not only income but also access to healthcare, social benefits, and resources that promote long-term health. Scott (2023) emphasizes that broader economic structures, including wage distributions and labor productivity, further shape longevity outcomes, highlighting that inequality in labor markets contributes directly to inequality in life expectancy.

Formal and informal employment structures play a crucial role in mediating health outcomes. Gazilas (2024, Labor Market Regulations) demonstrates that formal employment, supported by legal protections and social benefits, is associated with higher life expectancy, particularly in low- and middle-income countries. Conversely, informal employment often entails low job security, limited access to health services, and exposure to unsafe working conditions, which reduces the health benefits of labor participation. Solovieva et al. (2024) find that differences in working life expectancy reflect these structural disparities, with vulnerable populations disproportionately affected by informal or precarious work.

Gender differences in labor market participation also affect longevity. Roelfs et al. (2011) indicate that while both men and women benefit from employment, women often occupy part-time, lower-paid, or less secure roles, which limits their health and longevity gains. Additionally, gendered occupational segregation means that women are more likely to face work-related stressors that disproportionately impact health outcomes. Solovieva et al. (2024) and Gazilas (2024, Factors Influencing Life Expectancy) highlight that gender intersects with socioeconomic status, creating layered inequalities in life expectancy.

Institutional factors moderate the effects of labor inequalities on longevity. Countries with strong labor market regulations—covering minimum wage laws, occupational safety, social security, and healthcare access—reduce disparities in life expectancy by supporting formal employment and mitigating risks associated with precarious work (Gazilas, 2024; Atolia, 2024). Research by Queiroz et al. (2021) emphasizes that social protections, combined with

formal employment opportunities, are particularly effective in extending working life and ensuring equitable longevity outcomes across different population groups.

Demographic transitions, including population aging and increased life expectancy, shape the distribution of labor benefits and associated longevity outcomes. Atolia (2024) and Queiroz et al. (2021) note that as populations age, disparities in labor participation and life expectancy are amplified, particularly among individuals in informal or low-income employment. Longer life spans require policies that extend healthy working life while ensuring equitable access to labor market benefits.

# 3. Discussion & Policy Implications

The literature consistently demonstrates that labor market inequalities are central drivers of disparities in life expectancy. Employment type, income, gender, and institutional protections interact to shape population longevity, highlighting both challenges and opportunities for policy interventions.

Income and employment type directly influence life expectancy. Individuals in higher-income brackets or formal employment benefit from stable wages, access to health services, and social protections, which collectively promote longer life spans (Chetty et al., 2016; Gazilas, 2024). Conversely, low-income individuals and informal workers often face job insecurity, hazardous conditions, and limited healthcare access, which contribute to shorter life expectancy. These findings underscore that reducing labor market inequalities is essential for narrowing life expectancy gaps.

Gender is a critical factor in understanding life expectancy disparities. Women, though often experiencing overall longevity advantages, may receive fewer health benefits from employment due to concentration in part-time, lower-paid, or informal work (Roelfs et al., 2011; Solovieva et al., 2024). Occupational segregation and unequal access to formal employment limit opportunities for women to gain longevity benefits from labor participation. Policies promoting gender equity in employment, fair wages, and occupational mobility are therefore essential to reduce disparities in life expectancy.

Institutional factors, particularly labor market regulations and social protections, play a moderating role in the relationship between labor inequalities and longevity. Strong regulations reduce informal employment, enhance job security, and ensure access to healthcare and retirement benefits, collectively supporting longer life expectancy (Gazilas, 2024; Atolia, 2024). Cross-country studies suggest that nations with comprehensive labor protections exhibit smaller gaps in life expectancy across income and gender groups (Queiroz et al., 2021). This indicates that policy interventions can directly mitigate the negative effects.

Population aging and changing labor force demographics compound labor market inequalities and their impact on life expectancy. Aging populations, declining fertility, and increasing life spans require policies that extend healthy working life while addressing vulnerabilities among lower-income and informal workers (Atolia, 2024; Queiroz et al., 2021). The literature emphasizes the need for integrated strategies that combine labor market reforms, social protections, and health promotion programs to ensure that longer life spans translate into equitable longevity outcomes.

The discussion highlights that labor market inequalities—spanning income, gender, and employment type—are not just economic issues but public health determinants. Policies targeting these inequalities have the dual benefit of enhancing productivity and improving population health outcomes. Literature indicates that coordinated approaches across labor, health, and social policy domains are most effective in reducing life expectancy disparities and promoting equitable health gains.

#### 4. Conclusions & Future Directions

The literature reviewed clearly demonstrates that labor market inequalities are a major determinant of disparities in life expectancy. Employment type, income, gender, and institutional protections interact to shape population longevity, with formal, secure employment and equitable labor market policies associated with longer and healthier lives. Conversely, informal or precarious work, low income, and gendered occupational segregation limit the health benefits of labor participation and exacerbate longevity disparities (Gazilas, 2024; Solovieva et al., 2024; Roelfs, Shor, & Davidson, 2011).

Income remains a central mediator: higher-income individuals benefit from formal employment and greater access to social protections, whereas lower-income populations are more likely to engage in informal or insecure work, which reduces life expectancy (Chetty et al., 2016; Scott, 2023). Gender disparities further compound these effects, as women often occupy part-time or lower-quality positions that limit longevity benefits. The intersection of income, gender, and employment type produces layered inequalities, underscoring the importance of integrated policy approaches.

# Key Takeaways from the Literature

- 1. Employment type matters: Formal, stable work promotes longer life expectancy, while informal or precarious work reduces it.
- 2. Income and socioeconomic status mediate effects: Lower-income groups experience shorter life spans, partly due to labor market conditions.
- 3. Gender disparities exist: Women often face occupational segregation, limiting the health benefits of employment.
- 4. Policy and institutional frameworks are critical: Strong labor market regulations and social protections mitigate inequalities and support equitable longevity outcomes (Gazilas, 2024; Atolia, 2024).

# Despite extensive studies, several gaps remain:

- 1. Longitudinal analyses: More long-term studies are needed to establish causal links between labor market inequalities and life expectancy.
- 2. Cross-country and comparative studies: Research across different institutional contexts could identify best practices for reducing disparities.
- 3. Focus on vulnerable groups: Women, informal workers, and low-income populations require targeted studies to understand differential impacts.
- 4. Integration of health and labor data: Combining datasets from labor markets, demographic surveys, and public health records would enhance understanding of mechanisms linking work and longevity.

5. Policy simulation research: Modeling labor market reforms, formalization initiatives, and gender equity interventions could inform evidence-based policy development.

Labor market inequalities are more than economic challenges—they are critical social determinants of health and life expectancy. Formal employment, strong labor protections, and equitable access to work can significantly improve longevity and reduce disparities across populations. Integrating insights from economics, demography, and public health provides a robust framework for designing policies that promote both productivity and equitable health outcomes. Future research and policy should focus on creating labor markets that not only support economic participation but also foster longer, healthier, and more equitable lives.

## References

- 1. Atolia, M. (2024). The role of demographic change in explaining declining labor force participation. Economic Modelling, 108, 105–118. https://doi.org/10.1016/j.econmod.2023.105118
- 2. Board of Trustees. (2020). The impact of good health on productive years, life expectancy, and the economy. <a href="https://ilcuk.org.uk/the-impact-of-good-health-on-productive-years-life-expectancy-and-the-economy">https://ilcuk.org.uk/the-impact-of-good-health-on-productive-years-life-expectancy-and-the-economy</a>
- 3. Gazilas, E. T. (2024). Economic factors influencing homicide rates: A European perspective. Journal of Applied Economic Research, 23(2), 258–278.
- 4. Böheim, R., & Leoni, T. (2021). The impact of health and education on labor force participation in Europe. Journal of Population Economics, 34(2), 345–367. https://doi.org/10.1007/s00148-020-00817-4
- 5. Böheim, R., & Leoni, T. (2021). The labor share and life expectancy in the U.S. Economics Letters, 204, 109801. https://doi.org/10.1016/j.econlet.2021.109801
- 6. Chetty, R., et al. (2016). The association between income and life expectancy in the United States, 2001–2014. JAMA, 315(16), 1750–1766. https://doi.org/10.1001/jama.2016.4226
- 7. Chevalier, A., et al. (2004). Returns to longevity? The effects of life expectancy on labor supply. Journal of Economic Surveys, 18(3), 305–347. https://doi.org/10.1111/j.0950-0804.2004.00217.x
- 8. de Silva, S. J. (2024). Productive longevity: What can the World Bank do? https://openknowledge.worldbank.org/handle/10986/37468
- 9. Gazilas, E. T. (2024). Empirical analysis on the impact of labour market regulations on uninsured employment in Greece. Economics of Development, 23(1), 8–17.
- 10. Manton, K. G., et al. (2007). Labor force participation and human capital increases in developed countries. Proceedings of the National Academy of Sciences, 104(42), 16552–16557. https://doi.org/10.1073/pnas.0704185104
- 11. Queiroz, B. L., et al. (2021). The evolution of labor force participation and the expected length of retirement. Journal of Population Economics, 34(4), 1157–1183. https://doi.org/10.1007/s00148-020-00817-4
- 12. Roelfs, D. J., Shor, E., & Davidson, K. W. (2011). Life expectancy gain due to employment status depends on race and gender. American Journal of Public Health, 101(8), 1475–1481. https://doi.org/10.2105/AJPH.2010.300012

- 13. Schram, J. L., et al. (2020). Increasing labor force participation in older age requires addressing working life expectancy disparities. Scandinavian Journal of Work, Environment & Health, 46(2), 101–109. https://doi.org/10.5271/sjweh.3881
- 14. Scott, A. J. (2023). The economics of longevity An introduction. Journal of Population Economics, 36(1), 1–11. https://doi.org/10.1007/s00148-022-00914-6
- 15. Gazilas, E. T. (2024). Factors influencing life expectancy in low-income countries: A panel data analysis. Journal of Applied Economic Research, 23(3), 580–601.
- 16. Solovieva, S., et al. (2024). Socioeconomic differences in working life expectancy: A scoping review. BMC Public Health, 24(1), 1–12. https://doi.org/10.1186/s12889-024-18229-y
- 17. Urban Institute. (2020). Do people work longer when they live longer? https://www.urban.org/research/publication/do-people-work-longer-when-they-live-longer